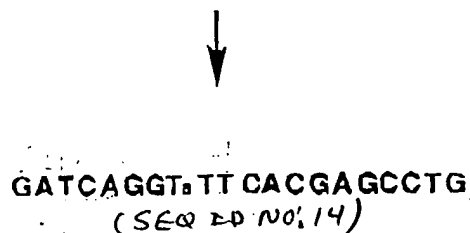
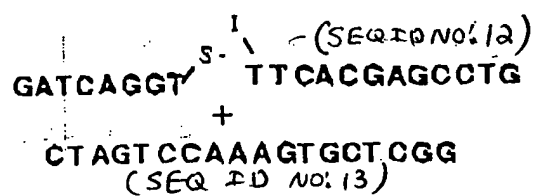
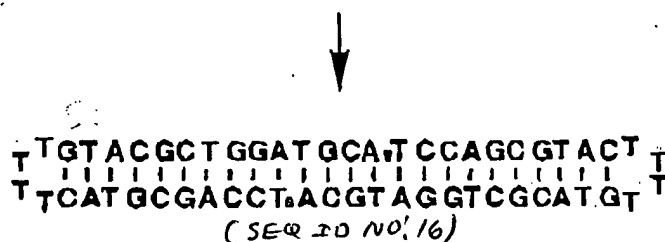
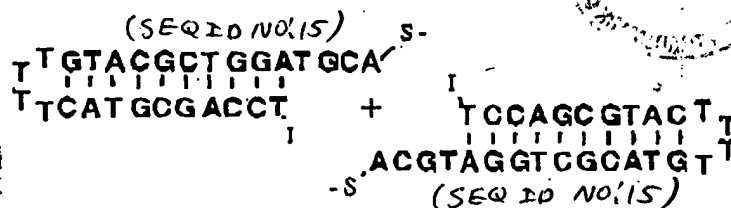


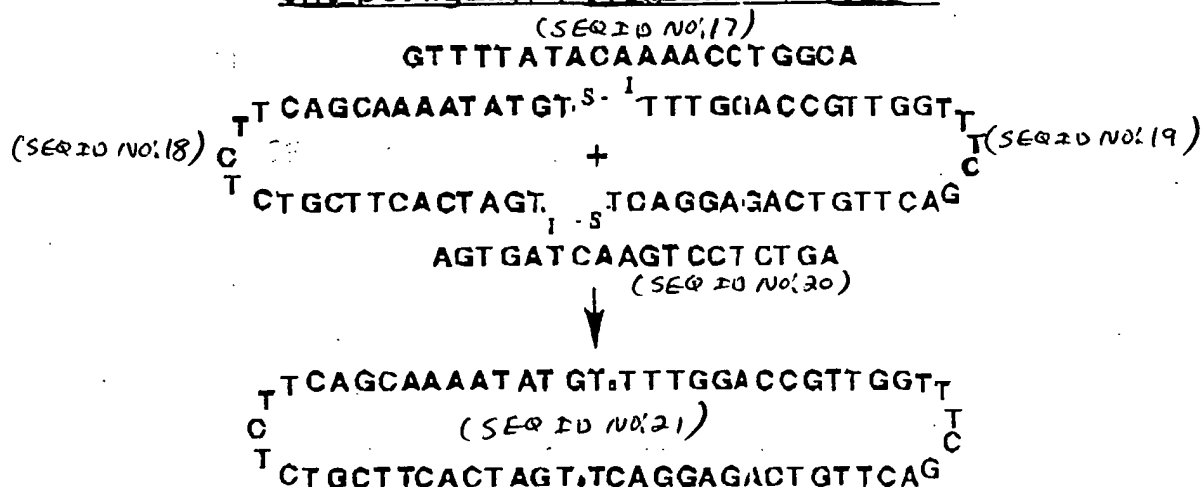
(a) ligation of ssDNA



ligation of duplex DNA



one pot ligation / cyclization of ssDNA



(b)

<u>rxn. type</u>	<u>conversion</u>	<u>isolated yield</u>
ssDNA ligation	>90%	44%
duplex ligation	75%	36%
ligation/cyclization	>90% (1st step) 50% (2nd step)	20%

Fig. 4



exonuclease / hydrolysis susceptibility

5'-GATCAGGT_pTT CACGAGCCTG-3' (SEQ ID NO: 14)

endonuclease susceptibility

T TGTACGCTGGA TGCA_pTCCAGCGTACT T
T CATGCGACCT_pACGT AGGTCGCATG T (SEQ ID NO: 16)

template for replication / transcription

(SEQ ID NO: 22)
5'-TAATACGACTCACTATA
3'-ATTATGCTGAGTGATATCCTGCCTATTCCGAGCACTT_pTGGACTAG
(SEQ ID NO: 23)

Fig. 5

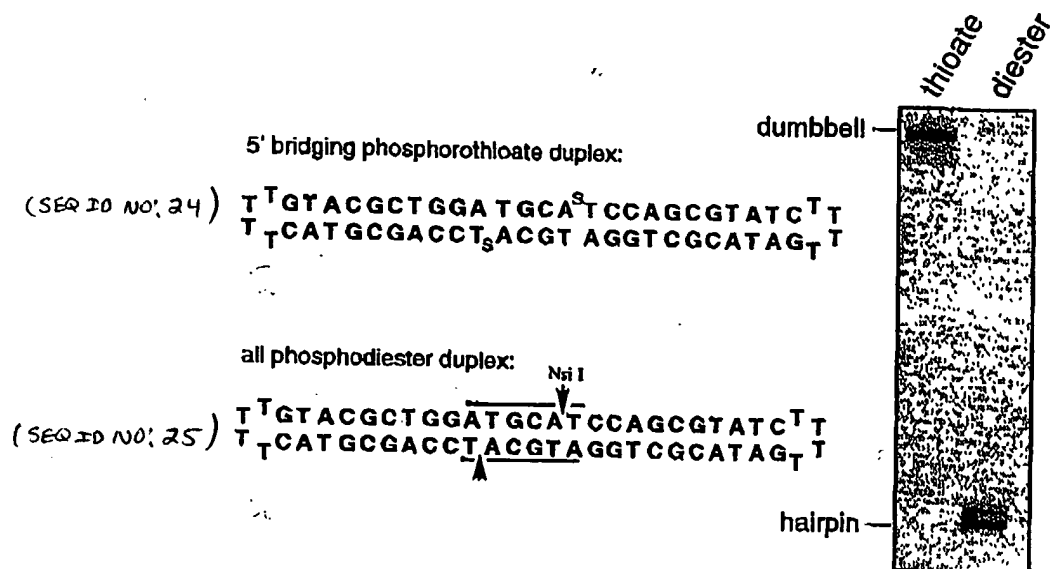


Fig. 7

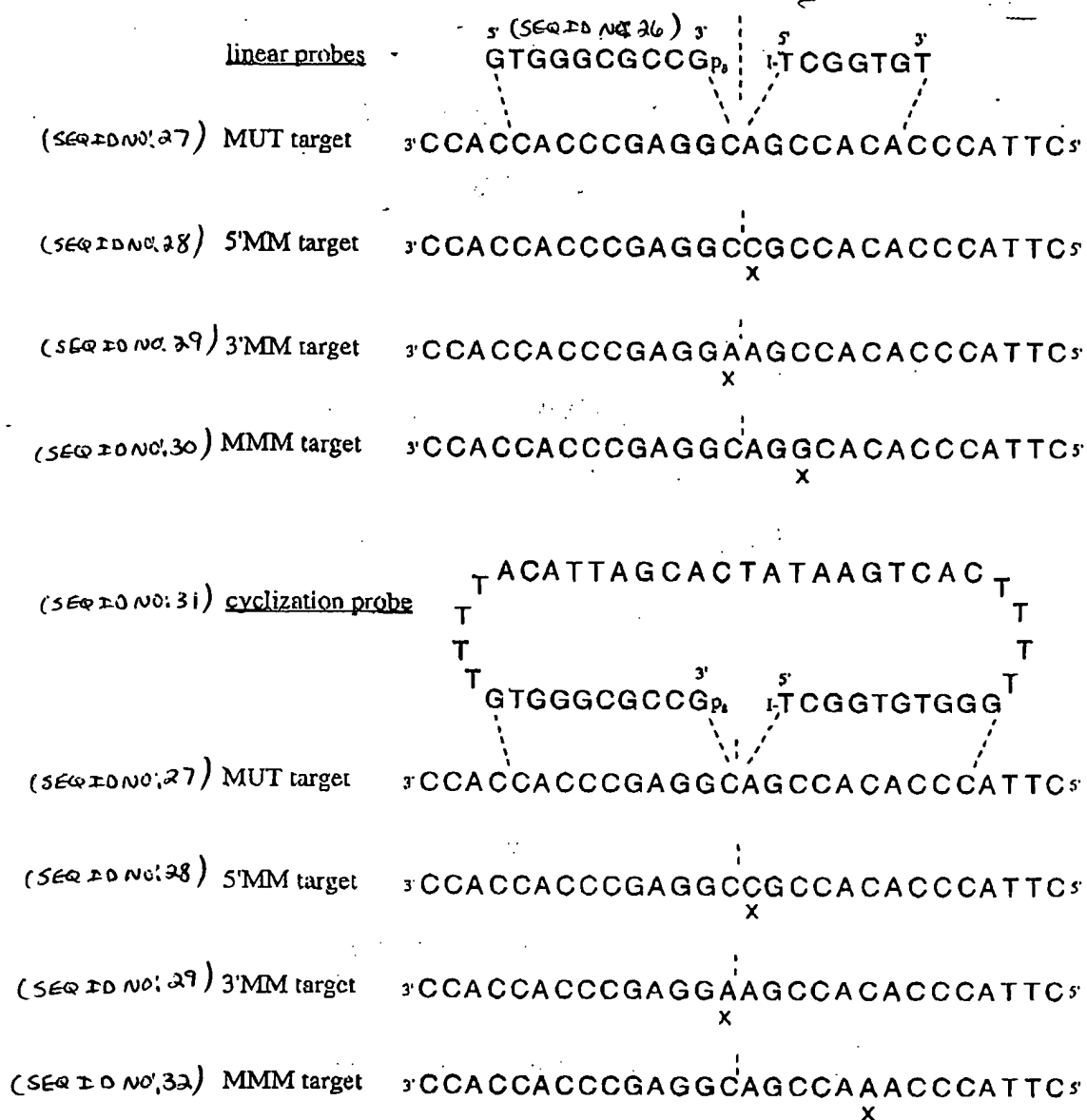


Fig. 8



Fig. 11

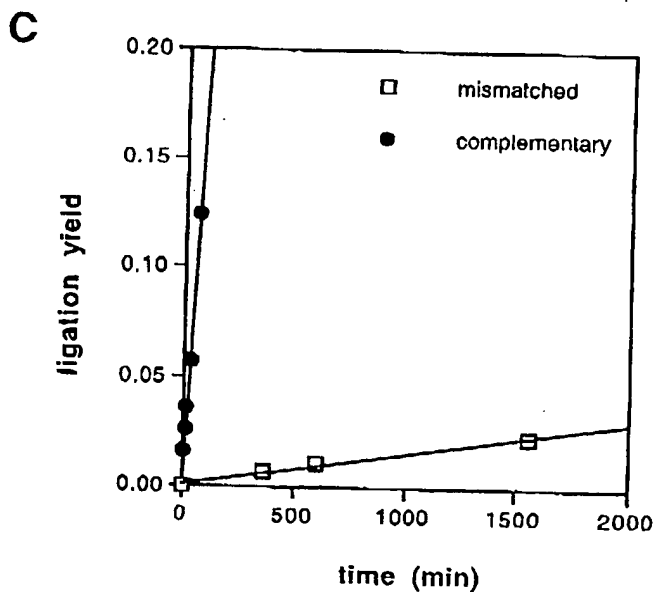
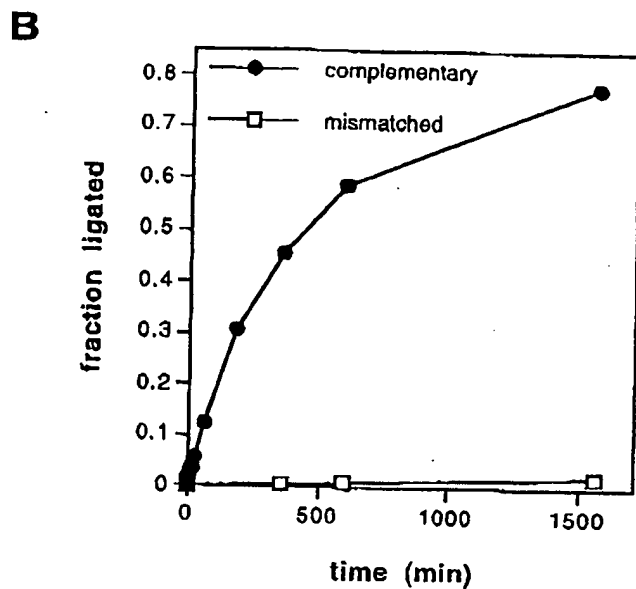
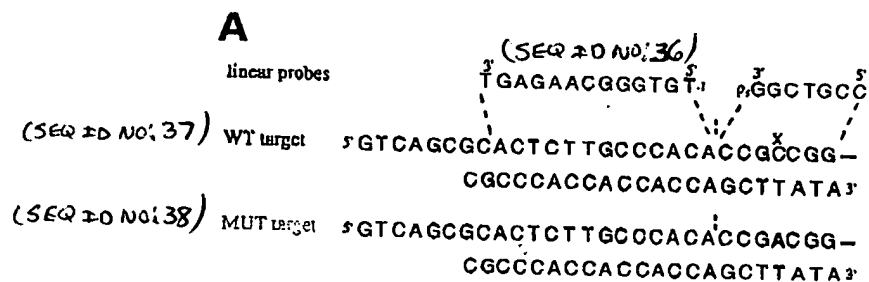


Fig. 12



Fig. 13

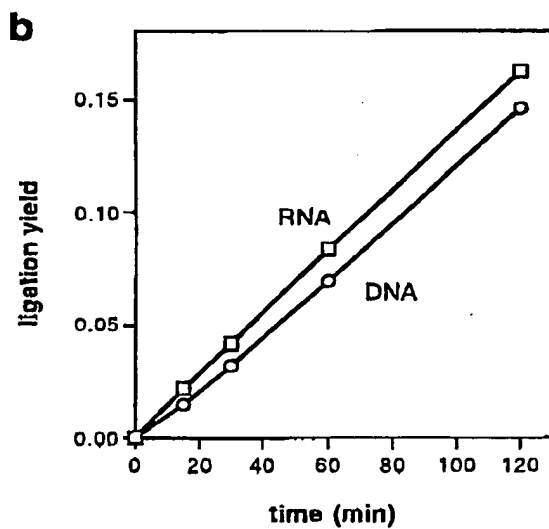
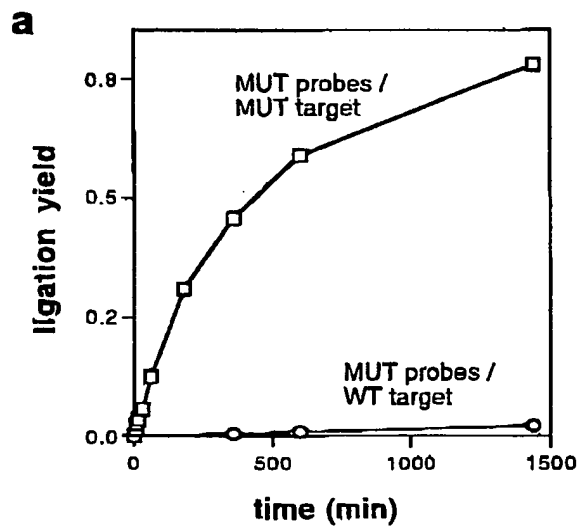


Fig. 14

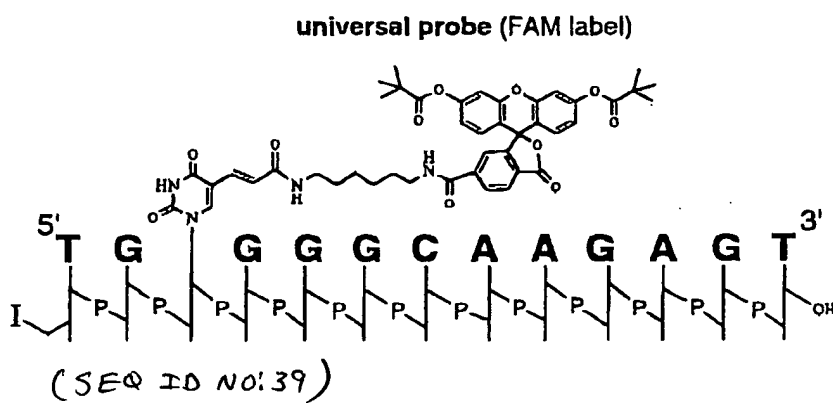
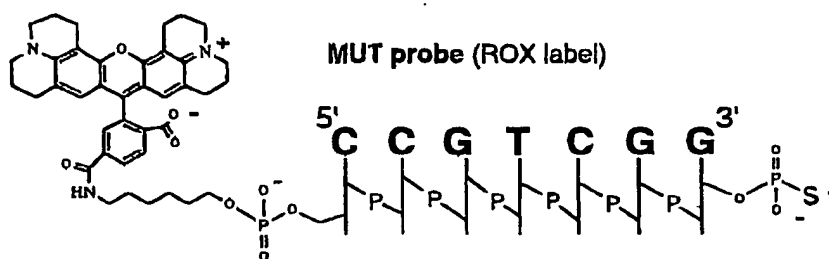
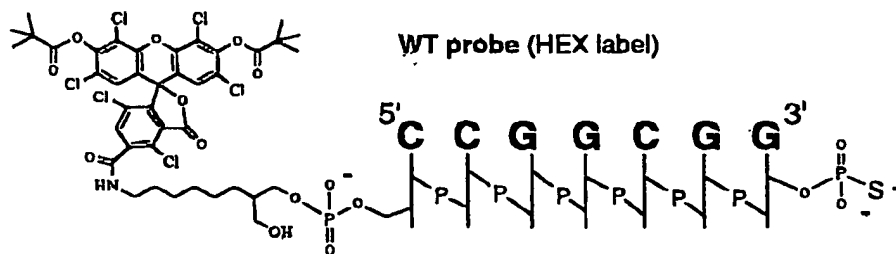


Fig. 17



probes 3' (SEQ ID NO: 36) 5' 3' SeGGC X GCC 5' (X=G,T)

WT target (SEQ ID NO: 37)
5' GTCAGCGCACTCTTGCCACACCG C CGGCGCCACCA CCACCAGCTTATA 3'

MUT target (SEQ ID NO: 38)
5' GTCAGCGCACTCTTGCCACACCG A CGGCGCCACCA CCACCAGCTTATA 3'

MUT RNA target (SEQ ID NO: 40)
5' GCGCACUCUUGCCACACCG A CGGCGCC 3'

Fig. 19

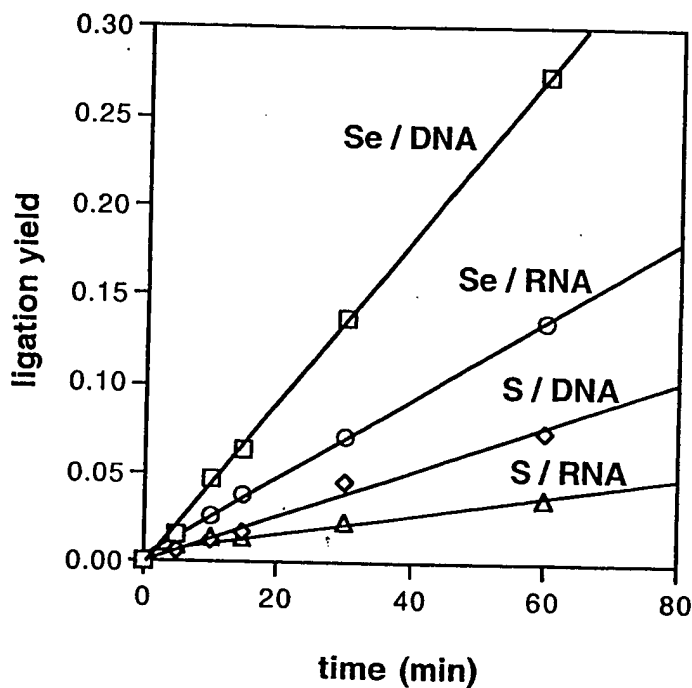


Fig. 20